

Notice of Allowability

Application No.

09/941,004

Applicant(s)

KOMORO ET AL.

Examiner

Art Unit

Yogesh K. Aggarwal

2615

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendment filed 12/14/2004.
2. ☒ The allowed claim(s) is/are 1-17.
3. ☒ The drawings filed on 14 December 2004 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|---|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____ |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____ |

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with William Kemppler (Reg. No. 28,228) on April 22, 2005.

2. The application has been amended as follows:

- a. Claim 1: lines 1-6, change "Microminiature image pickup device comprising: image pickup element, optical glass furnished on the front surface of said image pickup element, a stacked circuit board that is furnished on the rear surface of said image pickup element and that has a wiring pattern, wherein said image pickup element is mounted to said stacked circuit board so that said rear surface is mounted on an edge of said stacked circuit board along said diametral direction, whereby length of said image pickup device in said length direction is reduced, and a connection member that" to "Microminiature image pickup device comprising: image pickup element, optical glass furnished on a front surface of said image pickup element, a stacked circuit board that is furnished on a rear surface of said image pickup element and that has a wiring pattern, wherein said image pickup element is mounted to said stacked circuit board so that said rear surface is mounted on an edge of said stacked circuit board along a diametral direction, whereby length of said image pickup device in a length direction is reduced, and a connection member that".

3. The following is an examiner's statement of reasons for allowance:

The following prior art shows the current state of the art to this patent application:

- i. Kameishi (US Patent # 5418,566) teaches an endoscopic apparatus (figures 2a and 2b) a ceramic substrate 1 that has a multiple layers of wirings embedded connected to electrodes 9 formed on the side bank portions of the ceramic substrate 1, such that the wirings in the ceramic substrate 1 can be electrically connected with a flexible print substrate 8 attached on the side bank portions of the ceramic substrate 1 through the electrodes 9. This flexible print substrate 8 also has a number of chip components 12 attached besides the ceramic substrate 1.
- ii. Adair et al. (US Patent # 6,275,255) discloses an endoscopic apparatus (figures 1 and 2) disclosing a CCD 40 mounted on boards 50 and 60 with or without the connection members 62 in the length direction.

As can be seen, the prior art does not teach or reasonably suggest an image pickup element, optical glass furnished on a front surface of said image pickup element, a stacked circuit board that is furnished on a rear surface of said image pickup element and that has a wiring pattern, wherein said image pickup element is mounted to said stacked circuit board so that said rear surface is mounted on an edge of said stacked circuit board along a diametral direction, whereby length of said image pickup device in a length direction is reduced, and a connection member that electrically connects said image pickup element and the wiring pattern of said stacked circuit board in combination with other claimed elements.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yogesh K. Aggarwal whose telephone number is (571) 272-7360. The examiner can normally be reached on M-F 9:00AM-5:30PM.

4. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Groody can be reached on (571) 272-7950. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

5. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

YKA
April 22, 2005


TUAN HO
PRIMARY EXAMINER